

What is claimed is:

1. A quadrature modulation transmitter comprising:

a digital processing block for receiving an I-channel  
5 data, a Q-channel data and a clock signal, modulating the I-  
channel data or an inverted I-channel data into a first analog  
signal by means of an I-channel DAC according to a switching  
of an I-clock signal identical to the clock signal, and  
modulating the Q-channel data and an inverted Q-channel data  
10 into a second analog signal by means of a Q-channel DAC  
according to a switching of a Q-clock signal, the Q-clock  
signal being an inverted clock signal; and

an analog processing block for receiving the first and  
second analog signals from the digital processing block,  
15 adding the first and second analog signals, converting the  
added signal into an RF domain signal through a mixing  
operation, and amplifying and transmitting the RF domain  
signal.

20 2. The quadrature modulation transmitter as recited in  
claim 1, wherein the digital processing block includes:

a first inverter for inverting the I-channel data;

a first T flip-flop for receiving the I-clock signal  
through a clock terminal and outputting a first switch control  
25 signal according to the I-clock signal;

a first switch for turning on an output of the first  
inverter in case a output of the first T flip-flop is in a

first logic level and for turning on the I-channel data in case the output of the first T flip-flop is in a second logic level;

5 a first DAC for receiving the I-clock signal through a clock terminal, converting an output of the first switch into an analog signal and simultaneously performing a modulation;

a second inverter for inverting the clock signal and outputting the resulting value as the Q-clock signal;

a third inverter for inverting the Q-channel data;

10 a second T flip-flop for receiving the Q-clock signal through a clock terminal and outputting a second switch control signal according to the Q-clock signal;

15 a second switch for turning on an output of the third inverter in case an output of the second T flip-flop is in a first logic level and for turning on the Q-channel data in case the output of the second T flip-flop is in a second logic level; and

20 a second DAC for receiving the Q-clock signal through a clock terminal, converting an output of the second switch into an analog signal and simultaneously performing a modulation.

3. The quadrature modulation transmitter as recited in claim 1, further comprising a digital filter for matching a conversion speed of I-channel and Q-channel digital data  
25 outputted from a modem with an intermediate frequency and outputting the resulting data as the I-channel and Q-channel data to the digital processing block.